Forest Health Protection
Pacific Southwest Region

Date: August 21, 2018
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To: Ann Carlson, Forest Supervisor, Mendocino National Forest

Subject: Salt Project

At the request of Andrew Mishler (Silviculturist) a site visit was made to the Salt Project area on August 8, 2018. The objectives were to assess the current insect and disease conditions and discuss suitability for using the Farm Bill Insect and Disease CE.

Background

The Salt Project area covers approximately 3,000 acres within the Salt Creek drainage between Sanhedrin Ridge and Forest Highway 7 from the Forest boundary west to Slapjack Spring (T21N, R7W, sections 19-23, 31-35 and T21N, R8W, sections 25,26, 34-36) approximately 5 miles northwest of the community of Elk Creek (Figure 1). The

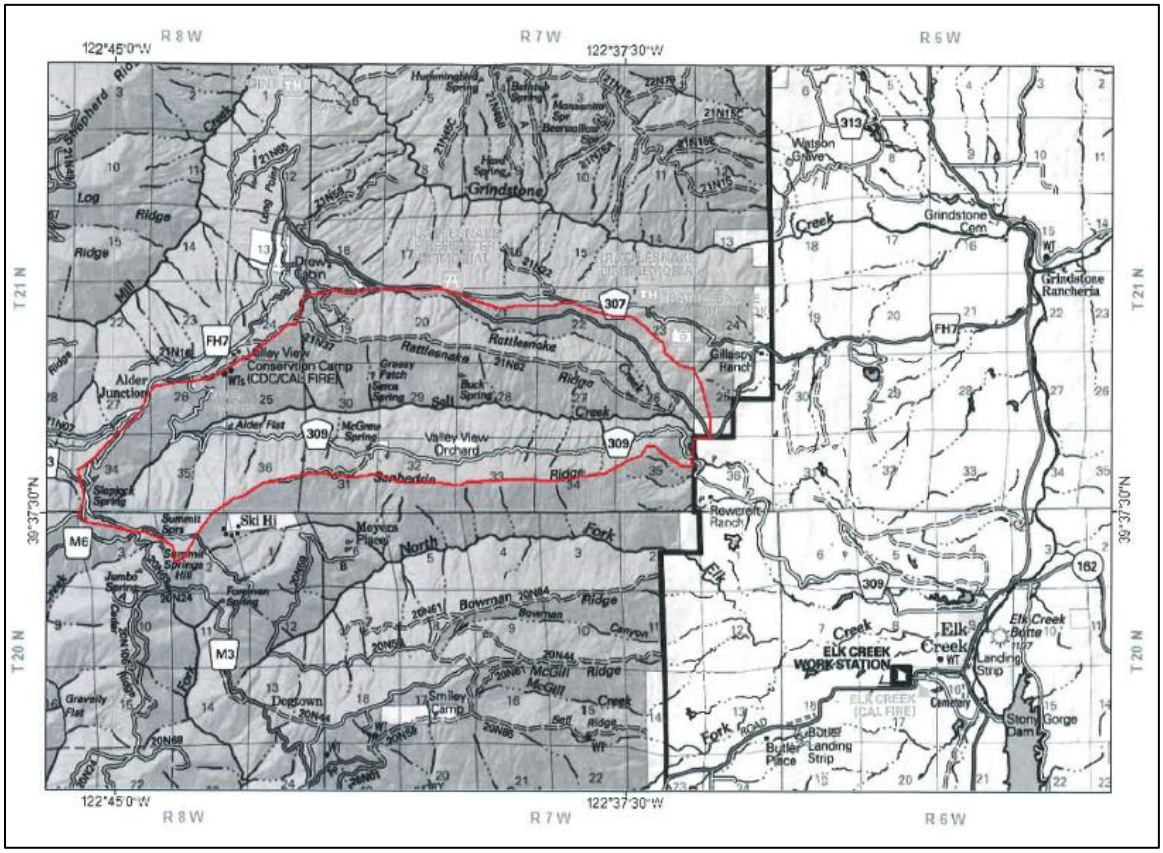

Figure 1. Map of proposed Salt Project boundary.

NORTHERN CALIFORNIA SHARED SERVICE AREA
3644 AVTECH PARKWAY, REDDING, CA 96002
(530) 226-2437

Cynthia Snyder
clsnyder@fs.fed.us

Pete Angwin
pangwin@fs.fed.us

lower elevation east side of the project area is primarily oak savannah moving to mixed conifer forest type westward and gaining in elevation 2,500-4,800 feet.

Much of the area was recently acquired by the Forest Service from Georgia Pacific, Louisiana Pacific, and Commander Timber companies. The western edge is known as the Commander Tract. The project boundary encompasses the CDC/Cal-Fire Valley View Conservation Camp as well as the USFS Alder Flat Station, Valley View Orchard, and another private inholding. PG&E also has a powerline across the west side. This project is in the beginning stages and has had one public meeting to incorporate comments from environmental consultants, private industry, and neighbors to discuss management alternatives as a collaborative effort. The plan is to have this project completed in FY19.

Observations

The lower elevation east side of the project area is primarily oak savannah with an ingrowth of ponderosa pine. Large, old stumps and legacy trees indicate that pine was a component historically prior to high-grading and clear cutting by the timber industries (figure 2). Further east and higher in elevation the mix includes sugar pine and Douglas-fir. Large old stumps indicate past spacing of large trees of about 70-90 feet. Further up the ridge toward the west the mix becomes primarily Douglas-fir with a mix of ponderosa and sugar pine and incense cedar. Stands become very dense with smaller diameter (3-8 inches dbh) trees and some legacy trees (24+ inches dbh) left by the timber industries. Basal area of the Douglas-fir stands is 200-400 square feet per acre (Figure 3).

Figure 2. Eastern, low elevation oak/pine site.

Crown lengths of all species appear to be 1/3 and greater.

There are areas in the middle to western side of the project area that appear to have increased mortality in the Douglas-fir. Much of the mortality appears to be in areas where there was high levels of disturbance in the past and may be a result of black stain root disease. The mix in the higher elevations has a strong sugar pine component as well as ponderosa pine and incense cedar. Black oak along with live oak and blue oak maintain a strong presence as well.

Figure 3. Dense Douglas-fir in mixed conifer on western side.

The 2017 aerial survey picked up four polygons totaling about 60 acres of severe mortality in ponderosa pine caused by western pine beetle on the northern side of the project area near Rattlesnake Ridge. This area has experienced similar mortality in 2015 across approximately 150 acres and about 200 acres of mortality on the southern side along Sanhedrin Ridge in mixed conifer due to western pine beetle and flatheaded fir borer in 2016. The area is a Tier 2 high hazard watershed and meets the requirements for using the Farm Bill Insect and Disease C.E.

Discussion

Discussions ranged from thinning the oak and creating space for the largest and best pines and keeping the best and straightest oaks of all species. Moving into the mixed

conifer zones it was discussed to favor pines and thin Douglas-fir to a basal area of about 80 square feet per acre. It is thought that the lower elevation and gentle slopes were historically pine/oak dominated with Douglas-fir ingrowth. Thinning would provide protection against wildfire for the private inholdings and add to the fuel break surrounding the Station and Conservation Camp. Thinning would decrease risk of bark beetle infestation in the pines that are being favored. As a visual of what the desired condition, we visited the Alder Springs Project near the Conservation Camp which was treated several years ago and is currently being maintained as a fuel break through prescribed fire.

Thinning the Douglas-fir and allowing other species to break up the continuity of root contacts would provide some protection against increased black stain root disease. The possibility of black stain in the Douglas-fir may not be highly important because the treatment would most likely be to thin the Douglas-fir heavily, removing about 70% of the overstory and maintaining a mix of species favoring the pine and oak.

If you have any questions regarding this report and/or need additional information, please contact Cynthia Snyder at 530-226-2437 or Pete Angwin at 530-226-2436.

/s/ Cynthia Snyder

CC: Andrew Mishler, Chris Losi, Sheri Smith, Phil Cannon, Sherry Hazlehurst, Chris Fischer, and Pete Angwin